

**DATA STRUCTURE AND MANAGEMENT SYSTEM
FOR A SUPERSET OF RELATIONAL DATABASES**

ABSTRACT OF THE DISCLOSURE

10 A data structure, database management system, and methods of validating data are disclosed. A data structure is described that includes a superset of interconnected relational databases containing multiple tables having a common data structure. The tables may be stored as a sparse matrix linked list. A method is disclosed for ordering records in hierarchical order, in a series of levels from general to specific. An example use with address databases is described, including a method for converting an input address having a subject representation into an output address having a preferred representation. Preferred artifacts may be marked with a token.

15 Alias tables may be included. This Abstract is provided to comply with the rules, which require an abstract to quickly inform a searcher or other reader about the subject matter of the application. This Abstract is submitted with the understanding that it will not be used to interpret or limit the scope or meaning of the claims.

20